

Application Serial No. 10/738,930
Date April 17, 2006
Reply to Office Action dated December 16, 2005

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Amendments to the Specification:

[0032] Airflow permeability through the meltblown layer of the scrim 30 is dependent upon the orientation, diameter, thickness, and mass/area of fibers.. In this manner, by varying the above parameters, the first layer or scrim 30 may be provided with an air permeability greater than zero which is tuned or optimized to a specific acoustic performance defined as a range of air permeabilities which maximize sound absorption in the desired acoustic frequency range. For example, a heavier basis weight of meltblown fiber or a thicker meltblown fiber layer in the scrim 30 will decrease airflow to assist in conjunction with the remaining elements of the shield 30-20 in absorbing low frequency sounds in the 500-5000 Hz range normally associated with road and tire noise.

[0037] A chemical low surface tension coating or wetting agent, such as a Scotchguard coating sold by 3M, various fluorocarbons, fluorosilicones and silicones, can be applied to the outer surface of the first layer 32-30 to increase the hydrophobicity of the first layer 30 while still providing targeted air permeability greater than zero through the first layer 30.